

REMARKS

Claims 1–11 and 38–43 are pending.

Amendments to the Claims

Claim 1 has been amended to recite that the first load platform is configured “to support a substrate substantially only at the edges thereof”. Support for this amendment is found, for example, in the specification in ¶ [0026] (“The support pins 110 are configured to provide peripheral or edge support for a wafer 150 mounted thereon.”).

Claim 38 has been amended to recite “wherein neither the first means for directly supporting the substrate nor the second means for directly supporting the substrate comprises lift pins.” Support for this amendment is found, for example, in the specification in ¶ [0026] (“Unlike conventional ‘lift pins’, the illustrated support pins 110 are positioned independently of the susceptor 120”).

Rejections Under 35 U.S.C. § 102

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Claims 1–3, 5–8, 10, 11, 38, 42, and 43 stand rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent Publication No. 2003/0075109 A1 (Arai). Independent claim 1 recites in part “the first load platform is fixed relative to the second load platform.” The Examiner refers to lift pins 13 as corresponding to a first load platform and a susceptor 12 as corresponding to a second load platform, stating, “The lift pins are fixed while the susceptor is rotated and vertically moved by the shaft 14, see Fig. 1.” As shown in FIGS. 1 and 2 of Arai and described in the specification, for example, in ¶¶ [0026]–[0027], the susceptor 12 moves up-and-down with respect to the lift pins 13.

Claim terms are given their “broadest reasonable interpretation” in prosecution before the Patent and Trademark Office. Such interpretation cannot be so broad as to be unreasonable and reach meanings that would not make sense to the skilled artisan. *See, for example, In re Morris*, 127 F.3d 1048, 1054, 44 U.S.P.Q.2d 1023 (Fed. Cir. 1997). The Examiner’s interpretation of the term “fixed” in claim 1 as meaning “fixed at a particular point in time” to thereby encompass the vertically movable lift pins of Arai is not reasonable. Applicant’s Claim 1 is an *apparatus* claim

and recites “the first load platform is fixed relative to the second load platform.” The plain language of Claim 1, the corresponding embodiments in the detailed description, and lengthy file history are abundantly clear that “fixed” does not encompass elements that are constructed and intended to move during normal operation, such as the movable lift pins **13** of Arai.

Claim 1 as amended also recites in part “the first load platform is configured to support a substrate substantially only at the edges thereof”. The lift pins **13** illustrated in FIG. 1 of Arai contact a central rear surface of the wafer **20**, as described in the specification: “When the support means P is further made to go down, the head portion 13a of each lift pin 13 which is in contact with the rear surface 21 of the wafer 20 pushes out the wafer 20 upwardly from the pocket portion 12a (the state that the wafer 20 is pushed out is shown in FIG. 1).” Arai at ¶ [0029].

Accordingly, Arai does not disclose the recited features in claim 1, and claim 1 is not anticipated by Arai for at least these reasons. Because claims 2, 3, 5–8, 10, and 11 are dependent on claim 1, these claims are also not anticipated by Arai for at least the same reasons.

Independent claim 38 as amended recites in part “wherein neither the first means for directly supporting the substrate nor the second means for directly supporting the substrate comprises lift pins.” Because the Examiner characterizes lift pins **13** as corresponding to the first means for directly supporting the substrate, Arai does not disclose every feature recited in claim 38. Consequently, claim 38 is not anticipated by Arai for at least this reason. Because claims 42 and 43 are dependent on claim 38 and recite additional features, claims 42 and 43 are also not anticipated by Arai for at least the same reason.

Claims 38–43 stand rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 6,221,166 (Nguyen). The Examiner characterizes a shield **150** and a support structure **182** as equivalent to the first means for directly supporting the substrate. Nguyen does not describe the support structure **182** of FIGS. 4 and 5 in the specification, but this structure appears to support the shield **150**.

In examining a means-plus-function element, an Examiner determines if an element in a reference: “(A) performs the function specified in the claim, (B) is not excluded by any explicit definition provided in the specification for an equivalent, and (C) is an equivalent of the means- (or step-) plus-function limitation.” M.P.E.P. 2183. The cited structures in Nguyen do not

perform the same function. Claim 38 recites “a first means for directly supporting the substrate”. As illustrated in FIGS. 4 and 5 in Nguyen, the shield **150** lies *on top* of the workpiece **110**, and as such, does not function to support the workpiece **110**. The specification describes several functions for the shield **150**: “prevent[s] deposition at the workpiece edge and backside” and “allows the thermal energy from the heater 131 to pass through”. Nguyen at 6:4–11. None of the functions includes directly supporting a substrate. As discussed above, Nguyen does not disclose a function for the support structure **182**, but the support structure **182** also does not appear to support a substrate. Accordingly, Nguyen does not disclose every feature of claim 38 and claim 38 is not anticipated by Nguyen for at least this reason. Because claims 39–43 are dependent on claim 38, these claims are also not anticipated by Nguyen for at least the same reason.

Claim Rejections Under 35 U.S.C. § 103

Claim 4 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Arai. The Examiner states that it would have been obvious to determine an optimal relative distance. Claim 4 is dependent on claim 1. As discussed above, Arai does not disclose or suggest every feature of claim 1. Accordingly, Arai also does not disclose or suggest every feature of claim 4 and claim 4 is not obvious over Arai for at least this reason.

Claim 9 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Arai in view of Nguyen. The Examiner relies on Nguyen only for disclosing a susceptor comprising a heat source. Claim 9 is dependent on claim 1. As discussed above, Arai does not disclose or suggest every feature recited in claim 1. Accordingly, the combination of Arai and Nguyen also does not disclose or suggest every feature recited in claim 9 and claim 9 is not obvious over the cited combination for at least this reason.

No Disclaimers or Disavowals

Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, the Applicants are not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. The Applicants reserve the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior

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prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that the Applicants have made any disclaimers or disavowals of any subject matter supported by the present application.

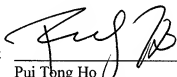
Applicants submit that all claims are now allowable over the reference of record for at least the reasons provided above. Applicants believe that the amendments and arguments provided in this paper are sufficient to overcome all of the Examiner's outstanding rejections. Applicants have not presented every possible reason that the pending claims are allowable over the cited references, and as such, do not acquiesce to any of the Examiner's characterizations of the pending claims, characterizations of the cited references, or arguments not specifically traversed. If the Examiner believes that any outstanding issues remain that may be resolved in an Examiner's amendment, the Examiner is invited to contact the undersigned.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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